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REMARKS

The Applicant would like to thank Examiner Pham for the analysis contained in the Examination Report dated July 16, 2004.

Claims 1 and 2 presently stand rejected under 35 U.S.C. § 103 as being unpatentable over Toreklsson et al. '095 in view of either Allan '044 or Northcutt '880. The Applicant acknowledges and respectfully traverses the raised obviousness rejections in view of the following remarks.

It is the Applicant's experience that 80% of the filtering units, that the Applicant is called upon to service, have a single side access opening. The other 20% of the units the Applicant is called upon to service have either a front or a rear access. Of the front or rear access units, some use only parallel tracks while others use "frames". The problem of air bypass, as described in the Background of Invention, is not as serious a problem with filters, which are inserted into "frames". The "frames" border the filters on all sides and serve to reduce air bypass, for all but the most demanding of applications. Side access filter assemblies and front or rear access filter assemblies that only use parallel tracks, as illustrated in Figs. 5 and 6 of the present application, have "tracks" at the top and bottom which provide adequate air bypass prevention for most applications, only at the top and bottom of the filters where the filters are inserted into the "tracks". The problem is air bypass between the abutting ends of the filters, as illustrated in Fig. 7.

Toreklsson et al. '095 discloses a rear access unit. As illustrated in Figs. 3 - 6, each of the filters is located in its own cartridge which, in turn, is positioned in its own individual frame. The frame being made up of sidewalls (Figs. 3 and 4) or corner brackets (Figs. 5 and 6). The filters or cartridges of Toreklsson et al. '095 remain as separate individual entities when placed within the frames. It should be noted that the filters of Toreklsson et al. '095 are placed into the frame from the rear, each filter being installed one at a time through different locations on the frame. Toreklsson et al. '095 is focused upon demanding air filtration applications requiring very high separation percentages (column 1, lines 9-11).

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In contrast to the teachings of Toreklsson et al. '095, according to the claims of the current application, the filters are connected by "I" shaped connectors that are separate from the filter bank or filter frame. These filters fit into channels of the "I" shaped connector and are inserted into the filter bank. Because the filters are joined together by means of the connectors, the filters are installed as though they are a single unit.

Next, Allen '044 teaches a filtering system comprising a frame holding a number of individual filters. These individual filters are placed separately into the bank. A plurality of "T" shaped members then supports the filters in the bank and form the "gridwork". These "T" shaped support members surround each of the filters and seal the filters with rearwardly facing flanges. As with the teaching of Toreklsson et al. '095, the filters of Allen '044 are inserted into the frame from the front or rear. Also in contrast to the presently claimed application there is no single access opening in which the frames are inserted into position.

The teachings of Allen '044 are, like the teachings Toreklsson et al. '095, in contrast to the currently claimed application for the same reasons stated above.

Northcutt '880 teaches a ceiling filter assembly, in which a single filter is inserted into an individual frame (see Figs. 8 and 9 of Northcutt '880). The filter is held in place within the frame by seats within support brackets. These support brackets 64, as seen in the cross sectional view of Fig. 7, do not in any way connect a number of filter panels in a side by side relation. Additionally these support brackets ("connector (64)") as referred to by the Examiner) have a distinctive cross section.

The Applicant asserts the claims of the currently claimed application are vastly different than the teachings of Northcutt '880. As currently claimed, the connector of the current application has an "I" shape. This shape enables the connectors to couple two filters together in such a way that the filters and connectors are able to slide into and along the frame without any undue restriction.

To further distinguish the claims of the current application from the cited references, the Applicant amended the claims to emphasize the differences. The claims now specify that

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the filter track consists of parallel spaced tracks, which receive filters in side by side abutting relation. It also specifies that when the filter panels are inserted into the filter bank, the first sides of each filter engages the filter tracks. The "I" shaped connectors are placed on the second sides of abutting filter panels to prevent air bypass between the second sides of adjacent filter panels. This amendment is intended to distinguish over the filter banks of the cited references, all of which teach "framing" of the filters. The filter bank of Toreklisson et al. 095 has individual frames into which each filter is inserted (see Fig 3-6). Allan '044 has one large frame 18. However, frame 18 cannot accommodate filters 28, unless they are first inserted into a "gridwork" 32. The filter bank of Allan '044, therefore, consists of frame 18 and gridwork 32, in combination. Northcutt '880 uses an individual frame, which substitutes for a ceiling tile.

The pending claims now specify that "I" shaped connectors that are discrete from the filter bank. The Applicant is making a claim to a particular configuration, an "I" shape. Under the Festo and Honeycutt doctrines relating to file wrapper estoppel, the Applicant will be restricted to such an "I" shaped configuration. As stated above, the Examiner has expressed the opinion that support brackets 64 of Northcutt '880 are "I" shaped, or more precisely can be "I" shaped or any other shape as desired. The Applicant respectfully does not view how the support bracket 64 as illustrated in Fig. 7 of Northcutt '880 resembles the "I" shape of Fig. 4 of the present claims. The Applicant can not conceive as to how the cross section of support bracket 64 could be used to connect abutting filter panels. However, it is difficult to contend with the Examiner regarding differences in the cross-section, when the Examiner indicates that the shape of the connector does not matter because you could use "any shape desired". The Applicant adamantly disagrees with this contention. In view of the Examiner's position on this issue the current claim amendments are intended to distinguish over the "support brackets 64" of Northcutt '880 on a different basis. The Applicant's invention is intended to prevent air bypass in existing filter banks in which filters are arranged in a side by side abutting relation. It is respectfully submitted that this differs from any "support bracket" of the

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references, regardless of shape, which is integral to the filter bank. It is also respectfully submitted that the "T" shaped configuration of Allan '044 is distinguishable from the present invention. Allan '044 uses "T" shaped members 34 to construct gridwork 32. The Applicant is can not conceive of how the "T" shaped "connector" of Allan '044 could be used to prevent air bypass in abutting filter panels, without using them to form a gridwork to "frame" each of the filter panels as taught by Allan '044.

The Applicant added dependent claims 3 and 4 relating to the use of a single access opening. This configuration represents the majority of the market and serves to further distinguish over the cited references. The Applicant asks that the Examiner give consideration to claims 1 and 2, which have been maintained with broad enough language to cover the versions illustrated in Figs. 5 and 6 of the present application.

In order to emphasize the above noted distinctions between the presently claimed invention and the applied art, the independent claims of this application now recite the features of

"[a] method of preventing air bypass in a filter bank, comprising of the steps of: providing a filter bank having a filter track, consisting of parallel spaced tracks, which receives filters in side by side abutting relation inserted through an access opening; providing rectangular filter panels. . . providing "I" shaped connectors, that are discrete from the filter bank. . . and inserting the filter panels through the access opening into the filter bank with the first sides of each filter engaging the filter tracks and sequentially connecting the filter panels in side by side relation with the "I" shaped connectors by placing the second sides of abutting filter panels into the opposed channels of the "I" shaped connectors, such that the positioning of the "I" shaped connector prevents air bypass between the second sides of adjacent filter panels".

Such features are believed to clearly and patentably distinguish the presently claimed invention from all of the art of record, including the applied art.

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New claim 5 further recites the features of "providing at least one "I" shaped connector...having a length substantially equal to the height of the two filter panels and having a pair of opposed channels with suitable for receiving one of the second sides of the two filter panels and an internal width dimension substantially equal to the width of each of the two filter panels; sequentially inserting the two filter panels through the access opening, one after the other, such that the first sides of each sequentially inserted filter panel engages with and are guided along with the filter track; and inserting the "I" shaped connector between the second sides of the two sequentially inserted and adjacent filter panels such that each one of the pair of opposed channels of the "I" shaped connector receives one of the second sides of the two filter panels and, during operation of the filter bank, the "I" shaped connector, restricts air from bypassing between the second sides of the two adjacent filter panels".

In view of the foregoing amendments and arguments, it is respectfully submitted that the present application is now in a condition for allowance. The Applicant, therefore, requests the early issue of a Notice of Allowance.

If any further amendment to this application is believed necessary to advance prosecution and place this case in allowable form, the Examiner is courteously solicited to contact the undersigned representative of the Applicant to discuss the same.

In view of the above amendments and remarks, it is respectfully submitted that all of the raised rejections should be withdrawn at this time. If the Examiner disagrees with the Applicant's view concerning the withdrawal of the outstanding rejections or applicability of the Toreklsson et al. 095, Allan 044 or Northcutt '880 references, the Applicant respectfully requests the Examiner to indicate the specific passage or passages, or the drawing or drawings, which contain the necessary teaching, suggestion and/or disclosure required by case law. As such teaching, suggestion and/or disclosure is not present in the applied references, the raised rejection should be withdrawn at this time. Alternatively, if the Examiner is relying on his/her expertise in this field, the Applicant respectfully requests the Examiner to enter an

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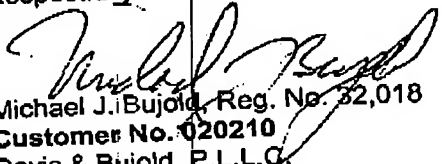
affidavit substantiating the Examiner's position so that suitable contradictory evidence can be entered in this case by the Applicant.

In view of the foregoing, it is respectfully submitted that the raised rejections should be withdrawn and this application is now placed in a condition for allowance. Action to that end, in the form of an early Notice of Allowance, is courteously solicited by the Applicant at this time.

The Applicant respectfully requests that any outstanding objections or requirements, as to the form of this application, be held in abeyance until allowable subject matter is indicated for this case.

In the event that there are any fee deficiencies or additional fees are payable, please charge the same or credit any overpayment to our Deposit Account (Account No. 04-0213).

Respectfully submitted,


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